## **CLAIMS**

1. Method of translating input data into at least one lexical output sequence, including a step of decoding input data during which sub-lexical entities represented by the said data are identified by means of a first model constructed on the basis of predetermined sub-lexical entities, and during which there are generated, as the sub-lexical entities are identified and with reference to at least one second model constructed on the basis of lexical entities, various possible combinations of the said sub-lexical entities,

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a method characterised in that the decoding step includes a substep of storing a plurality of possible combinations of the said sub-lexical entities, the most likely combination being intended to form the lexical output sequence.

- 2. Translation method according to Claim 1, characterised in that the storage of a combination is subject to a validation carried out with reference at least to the second model.
- 3. Translation method according to Claim 2, characterised in that a validation of storage of a combination is accompanied by an allocation to the combination to be stored of a probability value representing the likelihood of the said combination.
- 4. Translation method according to one of Claims 2 or 3, characterised in that various validation operations relating to various combinations relating to one and the same state of the first model are executed contiguously in time.
- 5. Translation method according to Claim 1, characterised in that the decoding step uses a Viterbi algorithm applied to a first Markov model consisting of sub-lexical entities, under the dynamic control of a second Markov model representing possible combinations of sub-lexical entities.
- 6. Speech recognition system using a translation method according to one of Claims 1 to 5.